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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT	PAPER NUMBER
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2192

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,220

Applicant(s)

GARRETT ET AL.

Examiner

Hoang-Vu A. Nguyen-Ba

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 31-34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-26 and 31-34 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the amendment filed February 11, 2005.

Response to Amendments

2. Per Applicants' request, Claims 1, 5-6, 8, 10, 15, 19-21, 24 have been amended; Claims 27-30 have been canceled; new Claims 31-34 have been added. Claims 1-26 and 31-34 are pending.
3. The objection to the specification is withdrawn in view of Applicants' amendments to correct some identified minor informalities.
4. The rejection of Claims 6, 8, 10, 15, 19, 20 and 24 under 35 U.S.C. § 112, second paragraph as being indefinite is withdrawn in view of Applicants' amendments to these Claims to clearly point out and distinctly claim the subject matter which Applicants regard as the invention.

Response to Arguments

5. Applicant's arguments filed February 11, 2005 have been fully considered but they are not persuasive. Following is an examiner's response to Applicants' arguments.

A. Claim 1

Applicants' arguments:

Applicants essentially argue that their Background section does not teach or fairly suggests the claims limitations. In particular, their Background section fails to teach or even suggest a unique identification number separate and apart from the "services number." Paragraph [0005] discusses assigning of a services number to a BIOS routine. Paragraph [0007] discusses determining whether a BIOS has a particular BIOS routine. If the "services number" discussed in

paragraph [0005] is hypothetically considered to be the claimed unique identification number as suggested by the Office action, then the claimed “determining... a services number of the BIOS routine based on a the unique identification number” becomes nonsensical. Conversely, if the “services number” discussed in paragraph [0005] is hypothetically considered to be the claimed services number, then the Background section fails to teach or even suggest the unique identification number.

Examiner’s response:

The U.S. Court of Customs and Patent Appeals has held that claims are to be given their broadest reasonable interpretation during the prosecution of a patent application. In re Pearson 494 F.2d 1399, 1403, 181 USPQ 641, (CCPA 1974).

In this instance, the examiner not only gives all the limitations of Claim 1 their broadest reasonable interpretation but also considers them as a whole. Claim 1 recites two means for identifying a BIOS routine, i.e., a unique identification number and a services number. The examiner interprets the limitation “services number” as the services number and the limitation “unique identification number” as the BIOS version number and date, both described in the Background section. The examiner also notes that paragraph [0007] describes how to determine whether or not a BIOS routine is supported by having a driver, which does the BIOS call, check a BIOS information table to obtain a BIOS version number. Accordingly, the examiner considers that all the limitations recited in Claim 1 are anticipated by the prior art in the Background section.

B. Claim 5

Applicants' arguments:

Applicants essentially argue that APA is woefully short of a “data table [that] correlates unique identification numbers of BIOS routines to BIOS call services numbers for the BIOS routines.”

Examiner's response:

The examiner interprets the claimed “data table,” “unique identification number,” “services number” and the “correlation” to be anticipated, respectively, by the BIOS information table, version number and date, services number and the determining step described in the Background section.

C. Claim 9

Applicants' arguments:

Applicants essentially argue that APA in view of Hopmann does not teach the limitations of Claim 9 and that the combination is improper because there is no suggestion to support the combination.

Examiner's response:

The identifying and determining steps are addressed above in the Claims 1 and 5. The maintaining step and GUID are obvious in view of Hopmann. See 2:48-50 and Fig. 3, respectively. The motivation to combine (allowing a resource to be uniquely identified across a network) is suggested in Hopmann at 2:61-64.

D. Claim 18

Applicants' arguments:

Applicants submits that APA does not teach “a set of BIOS routines stored on the BIOS ROM, each BIOS routine invoked by a services number” and “a correlation table stored on the BIOS ROM, the correlation table correlates a GUID to a service number for at least one BIOS routine.”

Applicants also submit that APA and Hopmann are not properly considered together.

Examiner's response:

The examiner considers that the first limitation of Claim 18 is anticipated by APA in paragraph [0004] where it is shown that most ROM BIOS manufacturers allow original equipment manufacturers (OEMs) to define their own BIOS routines and that the task of communicating with the hardware device is performed by calling BIOS routines to perform specific tasks. The reason why the manufacturers of ROM BIOS are called ROM BIOS manufacturers is because BIOS routines are stored on ROM. In order to call a BIOS routine stored on a ROM, the BIOS routine has to be uniquely identified by an identifier.

APA does not teach GUID. However, this GUID is taught by Hopmann for the purpose of allowing a resource to be uniquely identified across a network. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use this GUID in APA so that BIOS routines could be identified globally.

E. Claim 21

Applicants' arguments:

Applicants essentially present the same arguments set forth in conjunction with Claim 1.

Examiner's response:

Since Claim 21 recites the same limitations of Claim 1, which are applied to a plurality of BIOS routines, the same response to Applicants' arguments set forth in the discussion regarding Claim 1 also applies.

Claim Objection

6. Claim 34 is objected to because Claim 34 is shown to depend from Claim 29 which has been canceled by Applicants. For art rejection purposes, Claim 34 is assumed to depend from Claim 31.

Furthermore, Claim 34 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 32, if Claim 34 is amended to depend from Claim 31. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections – 35 U.S.C. § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 5-8, 21 and 23 are rejected under 35 U.S.C. § 102(a) as being anticipated by the admitted prior art (APA) of pages 1-3 of applicants' background.

Claims 1 and 21

APA discloses at least:

identifying BIOS routines with a unique identification number (see at least p.2, section [0005]);

correlating the unique identification number to at least a services number in a data table (see at least section [0007]); and

determining, by a BIOS calling program, a services number of the BIOS routine based on the unique identification number from the data table (see at least p. 3, section [0007]).

Claims 2 and 23

The rejection of base claims 1 and 21 are incorporated. APA further discloses *wherein determining a services number of the BIOS routine based on the unique identification number from the data table further comprises accessing the data table by the BIOS calling program based on the unique identification number to determine a services number associated with the unique identification number* (see at least p. 3, section [0007]).

Claim 5

APA does not specifically disclose:

a central processing unit (CPU);

a main memory array coupled to the CPU.

However, these items are deemed inherent to APA as discussed in sections [0004-0005] of Applicants' background of the invention. Without this basic setup, the method of calling the BIOS routines would be inoperative.

APA further discloses:

a basic input/output system (BIOS) read only memory (ROM) coupled to the CPU
(see at least sections [0004-0005]);

a data table stored within the BIOS ROM, and wherein data table correlates unique identification numbers of BIOS routines to BIOS call services numbers for the BIOS routines
(see at least section [0007]).

Claims 6 and 8

The rejection of base claim 5 is incorporated. Since claims 6 and 8 recite the same feature of claim 3, the same rejection is thus applied.

Claim 7

The rejection of base claim 5 is incorporated. APA further discloses:

a driver program executed by the CPU, the driver program adapted to execute BIOS routines (see at least section [0004]); and

wherein the driver program accesses the data table to determine a BIOS call service number for a BIOS routine based on the unique identification number (see at least sections [0004-0005]).

9. Claims 31 and 33 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,892,906 to Chou et al. ("Chou"). Chou has been cited in the previous Office action as relevant prior art reference (see PTO-892 as part of Paper No. 20041201).

Claim 31

Chou discloses at least:

a means for executing software programs (see at least Figure 1, items 10, 14 and related discussion in the specification);

a means for storing data and programs coupled to the means for executing (see at least Figure 1, items 17 and hard disk memory which is part of standard equipment of a computer, see 10; 3:47);

a means for storing basic input/output system (BIOS) routines coupled to the means for executing (see at least Figure 1, item 15 and related discussion in the specification); and

a means for storing unique identification numbers of BIOS routines correlated to BIOS call service numbers for the BIOS routines, the means for storing unique identification numbers associated with the means for storing BIOS routines (see at least 3:52 to 4:27; 4:42-58).

Claim 33

Chou further discloses:

a means for calling BIOS routines, the means for calling executed by the means for executing (see at least 4:6-19); and

wherein the means for calling further accesses the means for storing unique identification numbers to determine a BIOS call service numbers for BIOS routines based on the unique identification numbers (see at least 4:6-19).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3-4, 9-20, 22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA, as applied to base claims 1, 21 in view of U.S. Patent No. 6,578,069 to Hopmann et al. ("Hopmann").

Claims 3 and 24

The rejection of base claims 1 and 21 are incorporated. APA does not specifically disclose *wherein identifying BIOS routines with a unique identification number further comprises identifying BIOS routines with a Globally Unique Identifier (GUID) 128 bits in length*. However, Hopmann discloses a method for generating a GUID (see at least Figure 3 and related discussion in the specification) for the purpose of ensuring a unique ID across an entire network. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use Hopmann's method of generating GUIDs in combination with APA teachings for the purpose discussed above.

Claims 4 and 26

Rejections of base claims 1, 21 and intervening claims 3, 24-25 are incorporated. APA further discloses *wherein determining a services number of the BIOS routine based on the unique identification number from the data table further comprises accessing the data table by the BIOS calling program based on the unique number to determine a services number associated with the unique number* (see at least p. 3, section [0007]). APA does not specifically disclose a *GUID*. However, Hopmann discloses a method for generating

a GUID (see at least Figure 3 and related discussion in the specification) for the purpose of ensuring a unique ID across an entire network. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use Hopmann's method of generating GUIDs in combination with APA teachings for the purpose discussed above.

Claim 22

The rejection of base claim 21 is incorporated. APA further discloses *wherein correlating the unique identification numbers to BIOS routine service numbers in a data table further comprises supplying the data table listing the unique identification numbers, and for each identification number listing a BIOS routine service number* (see at least p. 3, section [0007]).

Claim 25

The rejection of base claim 21 is incorporated. Since claim 25 recites the same feature of claim 22, the same rejection is applied.

Claim 9

APA discloses at least:

identifying a first BIOS routine with a first unique identification number (see at least p. 2, section [0005]);

determining the availability of the first BIOS routine by searching the data table based on the first unique identification number, presence of the first unique identification number indicating availability of the first BIOS routine in the computer system (see at least p. 3, section [0007]).

APA does not specifically disclose *maintaining within the computer system a data table that lists unique identification numbers for available BIOS routines*. However, Hopmann

discloses a data structure that provides a unique identifier of a resource (2:48-50) for the purpose of allowing the resource to be uniquely identified across a network (2:61-64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use Hopmann's data structure in combination with APA teachings for the purpose discussed above.

APA does not specifically disclose *GUID*. However, Hopmann discloses a method for generating a GUID (see at least Figure 3 and related discussion in the specification) for the purpose of ensuring a unique ID across an entire network. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use Hopmann's method of generating GUIDs in combination with APA teachings for the purpose discussed above.

Claim 10

The rejection of base claim 9 is incorporated. Since claim 10 recites the same feature of claim 3, the same rejection is applied.

Claim 11

The rejection of base claim 9 is incorporated. APA does not specifically disclose *wherein maintaining within the computer system a data table that lists globally unique identification numbers for available BIOS routines further comprises maintaining the data table on a non-volatile device*. However, this feature is deemed inherent to APA as discussed in sections [0004-0005] of Applicants' background of the invention. Without the nonvolatile memory, the method of calling the BIOS routines would be inoperative.

Claim 12

Rejections of base claim 9 and intervening claim 11 are incorporated. APA does not specifically disclose *wherein maintaining the data table on a non-volatile device further comprises maintaining the data table on a BIOS read only memory (ROM)*. However, this feature is deemed inherent to APA as discussed in sections [0004-0005] of Applicants' background of the invention. Without the BIOS ROM, the method of calling the BIOS routines would be inoperative.

Claim 13

The rejection of base claim 9 is incorporated. Since claim 13 recites the same feature of determining a BIOS call service number of the BIOS routine of claim 1, the same rejection is applied.

Claim 14

Rejections of base claim 9 and intervening claim 13 are incorporated. Since claim 14 recites the same feature of correlating the GUID number to a BIOS service number in a data table, the same rejection is thus applied.

Claim 15

Rejections of base claim 9 and intervening claims 13-14 are incorporated. Since claim 15 recites the same feature of claim 3, the same rejection is applied.

Claim 16

Rejections of base claim 9 and intervening claims 13-15 are incorporated. Since claim 16 recites the same feature of claim 11, the same rejection is applied.

Claim 17

Rejections of base claim 9 and intervening claims 13-16 are incorporated. Since claim 17 recites the same feature of claim 12, the same rejection is applied.

Claim 18

APA discloses at least:

a set of BIOS routines stored on the BIOS ROM, each BIOS routine invoked by a service number (see at least p. 2, section[0004]).

APA does not specifically disclose:

a correlation table stored on the BIOS ROM, the correlation table correlates a Globally Unique Identifier (GUID) to a service number for at least one BIOS routine.

However, Hopmann discloses a data structure that provides a unique identifier of a resource (2:48-50) for the purpose of allowing the resource to be uniquely identified across a network (2:61-64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use Hopmann's data structure in combination with APA teachings for the purpose discussed above.

Claim 19

The rejection of base claim 18 is incorporated. APA does not specifically disclose *wherein the GUID is a number generated based in part on a substantially globally unique random number*. However, Hopmann discloses a method for generating a GUID (see at least Figure 3 and related discussion in the specification) for the purpose of ensuring a unique ID across an entire network. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use Hopmann's method of generating GUIDs in combination with APA teachings for the purpose discussed above.

Claim 20

Rejections of base claim 18 and intervening claim 19 are incorporated. Since claim 20 recites the same feature of claim 3, the same rejection is applied.

12. Claims 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou, as applied to base claim 31 in view of U.S. Patent No. 6,578,069 to Hopmann et al. ("Hopmann").

Claims 32 and 34

Chou does not specifically disclose *wherein the unique identification numbers of the BIOS routines further comprise Globally Unique Identification (GUID) numbers about 128 digits in length*. However, Hopmann discloses a method for generating a GUID (see at least Figure 3 and related discussion in the specification) for the purpose of ensuring a unique ID across an entire network. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use Hopmann's method of generating GUIDs in combination with Chou teachings for the purpose discussed above.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 7:15 – 17:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Tuan Dam can be reached at (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Art Unit 2192
June 12, 2005

**ANTONY NGUYEN-BA
PRIMARY EXAMINER**